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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/461,061	12/15/1999	KEITH R. MCCRAE	6056-260	3290
23973	7590	03/13/2003	EXAMINER	
DRINKER BIDDLE & REATH ONE LOGAN SQUARE 18TH AND CHERRY STREETS PHILADELPHIA, PA 19103-6996			ROBINSON, HOPE A	
			ART UNIT	PAPER NUMBER
			1653	

DATE MAILED: 03/13/2003

23

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/461,061	Applicant(s) McCrae
Examiner HOPE ROBINSON	Art Unit 1653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on Dec 13, 2002
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.
- Disposition of Claims
- 4) Claim(s) 1-8 and 12-48 is/are pending in the application.
- 4a) Of the above, claim(s) 8, 12-23, and 25-48 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-7 is/are rejected.
- 7) Claim(s) 24 is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 22 6) Other: _____

Art Unit: 1653

DETAILED ACTION

1. Applicant's response to the Office Action mailed July 17, 2002, in Paper No. 21 on December 13, 2002 is acknowledged. It is noted that applicant submitted an IDS which has been reviewed.

Claim Disposition

2. Claims 1-8 and 12-49 are pending. Claims 1-7 and 24 (SEQ ID NOS: 1-4, 9 and 10) are under examination.

Restriction

3. It is noted that Applicant requested reconsideration with regard to the restriction requirement, however, the arguments presented were not persuasive. The response states that peptides contained in SEQ ID NO: 9 and 10 should be a part of the elected group because the sequences are related to SEQ ID NO: 1 which is contained in both sequences (SEQ ID NO: 1 is referred to as a core sequence. Upon due reconsideration SEQ ID NO:9 and 10 will be examined as recited in claims 6 and 7 of the elected invention. Applicant's statements have been fully addressed.

Art Unit: 1653

4. The following grounds of rejection are or remain applicable :

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Auerswald et al. (FEBS, vol. 321, no. 1, pages 93-97, 1993).

Auerswald teach the sequences contained in SEQ ID NOs: 1-4, 9 and 10 of the instant application (see Figure 3 of the reference). Although the sequence disclosed by Auerswald exceed 12 amino acid residues, the claims recite open language such as "comprising" and "has". Therefore as the reference teaches sequences that are identical to the claimed sequences the claims are anticipated.

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1653

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103 (a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103 (c) and potential 35 U.S.C. 102 (f) or (g) prior art under 35 U.S.C. 103 (a).

7. Claims 1-7 and 24 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Auerswald et al. (FEBS, vol. 321, no. 1, pages 93-97, 1993).

The teachings of Auerswald et al. over claims 1-7 are set forth above. Although, Auerswald does not teach a method of inhibiting angiogenesis comprising administering the peptide disclosed, Auerswald teaches the claimed peptides with a 100% sequence identity which are described in the instant specification as possessing anti-angiogenic activity (see page 4 of the specification). In addition, the reference provides motivation to obtain a method to inhibit angiogenesis. Auerswald teach that there is a structure function relationship with the disclosed peptides, thus, once in possession of the anti-angiogenic peptides, the method is an obvious

Art Unit: 1653

extension. Additionally, it is well known in the art that peptides derived from Kininogen can inhibit angiogenesis . Therefore, the claimed invention as a whole was *prima facie* obvious.

8. Claims 1-7 and 24 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Auerswald et al. (FEBS, vol. 321, no. 1, pages 93-97, 1993) taken with Colman et al. (Blood, vol. 92, no. 10, November 15, 1998).

Auerswald et al. teach peptides derived from kininogen that are identical to the claimed invention which are disclosed as being anti-angiogenic (see page 4 of the instant specification). In-as-far-as Auerswald et al. does not teach the method of claim 24 explicitly, Colman et al. teach the inhibition of angiogenesis by peptides derived from kininogen. Although Colman et al. does not disclose the claimed sequence, Colman et al. teaches the same domain as claimed. For example, page 7 of the instant specification disclose that the invention is directed to peptide fragments of the HK domain 3, which fragments inhibit endothelial cell proliferation and thus possess anti-angiogenic activity. Colman et al. teach that HKa is proangiogenic and that peptides from HKa could complete and inhibit angiogenesis by inhibiting the interaction of HKa with uPAR. Therefore, one of ordinary skill in the art would be motivated to combine the teachings of Auerswald et al. with Colman et al. because both references teach peptides derived from Kininogen and Colman et al. teach a method of inhibition of angiogenesis with said peptide. Thus, the claimed invention was obvious to make and use at the time it was made and was *prima facie* obvious.

Art Unit: 1653

9. Applicant's arguments filed on December 13, 2002 has been fully considered. Note that the rejections of record have been withdrawn, however, new grounds of rejections have been instituted. Upon due reconsideration the prior art cited as art of record has been relied upon as the claims recite open language such as "comprising" which does not limit the length of the peptide to a length defined by X1-SEQ ID NO:1-X2.

Conclusion

10. No claims are presently allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hope Robinson whose telephone number is (703) 308-6231. The examiner can normally be reached on Monday and Wednesday-Friday from 9:00 am to 5:30 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S.F. Low, can be reached at (703) 308-2923.

Any inquiries of a general nature relating to this application should be directed to the Group Receptionist whose telephone number is (703) 308-0196.

Papers related to this application may be submitted by facsimile transmission. The official fax phone number for Technology Center 1600 is (703) 308-4242. Please affix the examiner's name on a cover sheet attached to your communication should you choose to fax your

Art Unit: 1653

response. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG (November 15, 1989).

Hope Robinson, MS

Patent Examiner

Christopher S. F. Low
CHRISTOPHER S. F. LOW
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600